

ABSTRACT OF THE DISCLOSURE

An eddy-current sensor for nondestructive testing according to the present invention includes a planar exciting coil having a pair of current lines in parallel with each other through which exciting currents flow in opposite directions to each other during the testing, for generating an alternative magnetic field applied to a subject to be nondestructively tested by the exciting currents, and at least one MR element positioned on a central axis between the pair of current lines and on the opposite side to the subject in relation to the exciting coil, for detecting a magnetic field generated newly from the subject by an eddy-current induced by the alternative magnetic field.